

## New Product

# TK83 Balance Master<sup>®</sup> 2 Field Balancing Kit

*Properly balanced machines result in improved operations,  
reduced bearing wear and fewer machine failures.*

**R**ecognizing the cost benefit in being able to balance machines on-site, Bently Nevada introduced the Balance Master in 1983. Today, using micro-processor based technology, we have designed the Balance Master 2. The small size and capabilities of this instrument provide an even more cost-effective, reliable means for on-site balancing of pumps, fans, blowers and other rotating machinery.

The TK83 is a handheld vibration diagnostic instrument. It accepts vibration input from proximity transducers, velocity Seismoprobe<sup>®</sup>, or accelerometers and a Keyphasor<sup>®</sup> input from a proximity transducer, an optical pickup or a stroboscope. In addition to the 1X vibration amplitude, the TK83 also provides 2X information for detection of other machinery malfunctions and DC (gap) voltage.

The Field Balancing Kit provides everything necessary for obtaining vibration amplitude and phase angle information required to professionally perform on-site balancing. Proximity probes and cables, a velocity Seismoprobe and an optical pickup all with temporary mounting accessories are included in the kit.

The TK83 accepts various transducer inputs but does not provide power for these transducers. Transducer power, if required, can be obtained through the use of the TK84 Temporary Transducer Interface and the TK85 Dual Temporary Proximitors<sup>®</sup>. Both are included in the Field Balancing Kit.

The TK84 is a two channel unit powered by a 9-volt battery. Channel A provides power to an optical Keyphasor and channel B provides power to a Proximitors.



**Bently Nevada's new Field Balancing Kit. TK83 Balance Master 2, TK84 Temporary Transducer Interface, and TK85 Dual Temporary Proximitors. Hardware for nearly any field balancing application.**

The unit also serves as an interface to output the signals of these transducers back to the TK83 or another diagnostic instrument which might require the signal(s).

Two independent channels of proximity measurement are provided by the TK85. Also powered by a 9-volt battery, the internal proximitors can be used with either permanently installed 5mm or 8mm proximity probes or with temporary installed probes to provide vibration and Keyphasor data.

Completing the Field Balancing Kit is the Balancing Manual, providing a comprehensive overview of balancing rotating

machines with detailed examples in both English and metric units. The manual includes the program listing and bar codes for the Bently Nevada Multiplane Balancing Software package. This balancing package works with the HP41CV handheld calculator to ensure accurate, consistent information. It eliminates tedious hand calculations.

This information is essential to successfully analyze the imbalance characteristics of rotating machinery.

For more information on the TK83 Balance Master 2 Field Balancing Kit please refer to L6025. ■